

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Girish K. Muralidharan
§ Confirmation No. 9698
Serial No.: 10/723,864
§ Group Art Unit: 2443
Filed: November 26, 2003
§ Examiner: Fearer, Mark D.
For: METHOD AND APPARATUS
FOR DYNAMICALLY
ADAPTING IMAGE UPDATES
BASED ON NETWORK
PERFORMANCE
§ Atty Docket: GEMS:0249/FLE/DOO
§ 138256-1 SV
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February 1, 2011	/Matthew C. Dooley/ Matthew C. Dooley
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REPLY BRIEF PURSUANT TO 37 C.F.R. § 41.41

The appellant submits this reply brief pursuant to 37 C.F.R. § 41.41 and in response to the examiner's answer mailed on December 1, 2010. Specifically, this reply brief highlights the underlying deficiencies of the contentions made by the examiner in the examiner's answer with respect to Collins, U.S. Publication No 2002/0029285, (hereinafter "Collins"), and Tanenbaum, Patent No. 5,119,319 (hereinafter "Tanenbaum"). In the interest of brevity, the appellant addressed below only those issues or arguments raised in the answer that are particularly noteworthy. Accordingly, in view of the appellant's attempt to avoid repetition in this reply, the appellant respectfully requests that the board consider the following remarks in addition to the complete arguments set forth in the appeal brief filed on September 27, 2010.

First Ground of Rejection

In the examiner's answer, the examiner maintained that claims 1-3, 5-10, 12-13, 15-17, 20-23, 31-35, 40, 42, and 44-49 were rejected under 35 U.S.C. § 102(b) as anticipated by Collins. *See Examiner's Answer, page 3.* The appellant respectfully urges the Board to reverse this rejection in view of the reasons set forth in the appellant's brief, and reiterated below.

Legal Precedent

Anticipation under Section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under Section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). To maintain a proper rejection under Section 102, a single reference must teach each and every limitation of the rejected claim. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). The prior art reference also must show the *identical* invention "*in as complete detail as contained in the ... claim*" to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989) (emphasis added). Accordingly, the appellant need only point to a single element not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter.

Omitted Features of Independent Claim 1

Collins fails to anticipate all elements of independent claim 1. Independent claim 1 recites, *inter alia*, "a serving station coupled to a medical diagnostic imaging system for controlling the imaging system and configured to receive image data, the serving station comprising a scanner module configured to modify a scanning rate of the image data...and a plurality of network sensors in communication with the serving station." (Emphasis added.)

In the examiner's answer, the examiner suggested that Collins anticipates each of the above noted recitations present independent claim 1. *See Examiner's Answer, pages 3-5.* The appellant respectfully disagrees.

Independent claim 1 recites a serving station that is coupled to a medical diagnostic imaging system. It appears that the examiner has wholly ignored these recitations in rejecting independent claim 1. *See* Examiner's Answer, page 3. There is simply no disclosure of any element in Collins that is coupled to a medical diagnostic imaging system, let alone a serving station coupled thereto. Indeed, even in the arguments section of the examiner's answer, the examiner is wholly silent as to the disclosure of any element coupled to a medical diagnostic imaging system, let alone a serving station coupled to a medical diagnostic imaging system, as recited in independent claim 1. *See* Examiner's Answer, pages 21-22. Moreover, because Collins fails to disclose any element coupled to a medical diagnostic imaging system, clearly Collins also cannot be read as disclosing a serving station that controls the (medical diagnostic) imaging system. Accordingly, the appellant respectfully submits that Collins fails to anticipate all elements of independent claim 1.

Moreover, the appellant is unable to find any discussion in Collins relating to a scanner module configured to modify a scanning rate of the image data, as recited in independent claim 1. While the examiner has argued that a server agent 160 of Collins may be read as the recited scanner module (*see* Examiner's Answer, page 21) it appears that the server agent 160 of Collins, at best, adapts the processing rate of graphical data in response to changing conditions. *See* Collins, paragraph 14. However, the processing rate disclosed by Collins appears to be more aptly read to be the rate at which graphical data may be transmitted to a remote user workstation (*see* Collins, paragraph 14), and not the rate at which image data is scanned (i.e., the scanning rate of the image data), as recited in independent claim 1. That is, there is no disclosure in Collins that modifying a processing rate of graphical data (which, for example, would have already been scanned to form the graphical data) is analogous to modifying the scanning rate of the image data, as recited in independent claim 1. As such, the appellant respectfully submits that the examiner has erred in reading the server agent 160 as the scanner module of independent claim 1 because the server agent 160 of Collins fails to modify the scanning rate of the image data, as recited in independent claim 1.

Finally, the examiner cited all of paragraph 14 of Collins as teaching a plurality of network sensors in communication with the serving station, as recited in independent claim 1. *See* Examiner's Answer, page 4. Moreover, the examiner further argued that the disclosure of a determination of network conditions of a given network was sufficient to anticipate a plurality of network sensors in communication with the serving station, as recited in independent claim 1. *See* Examiner's Answer, page 21. The appellant notes that while the cited portion of Collins may generally discuss determining the network conditions of a network that couples client and server agents (*See* Collins, paragraph 14) there is nothing in this general disclosure that anticipates with any specificity how the network conditions are to be determined. For example, network conditions could be measured via transmission of test packets inclusive of pilot symbols from one location to another in the network to determine noise and/or packet collisions in the network. Or, for example, packets could be transmitted along various network paths to determine latency across those paths to be used in determining the network conditions. In short, the cited portion of Collins simply does not disclose the manner in which network conditions may be determined. Accordingly, it is improper for the examiner to suggest that a disclosure by Collins that network conditions may be determined is sufficient to anticipate how those network conditions are specifically determined, i.e., by a plurality of network sensors in communication with the serving station, as recited in independent claim 1. Collins simply does not disclose the use of any elements that may be read as a plurality of network sensors, let alone a plurality of network sensors in communication with the serving station, as recited in independent claim 1.

As such, for at least the reasons set forth above, Collins fails to disclose all recitations of independent claim 1 and, therefore, cannot anticipate the claim under Section 102. Accordingly, the appellant respectfully requests that the Board direct the examiner to withdraw rejection and allow independent claim 1, as well as all claims depending therefrom.

Omitted Features of Independent Claim 15

Collins fails to anticipate all elements of independent claim 15. Independent claim 15 recites, *inter alia*, "linking a serving station to a served station via a network, the serving station being coupled to a medical diagnostic imaging system for controlling the imaging system and

being configured to receive image data...measuring network performance between a serving station and a served station, wherein the serving station provides screen data derived from an imaging system to the served station, and adjusting the screen data transmitted to the served station automatically based on the measurement of the network performance, wherein adjusting the screen data comprises modifying a frame buffer scanning algorithm based on the network performance.” (Emphasis added.)

Similar to independent claim 1 discussed above, independent claim 15 recites a serving station that is coupled to a medical diagnostic imaging system. It appears that the examiner has wholly ignored these recitations in rejecting independent claim 15. *See* Examiner’s Answer, page 8. There is simply no disclosure of any element in Collins that is coupled to a medical diagnostic imaging system, let alone a serving station coupled thereto. Indeed, even in the arguments section of the examiner’s answer, the examiner is wholly silent as to the disclosure of any element coupled to a medical diagnostic imaging system, let alone a serving station coupled to a medical diagnostic imaging system, as recited in independent claim 15. *See* Examiner’s Answer, page 22. Moreover, because Collins fails to disclose any element coupled to a medical diagnostic imaging system, clearly Collins also cannot be read as disclosing a serving station that controls the (medical diagnostic) imaging system, as recited in independent claim 15. Accordingly, the appellant respectfully submits that Collins fails to anticipate all elements of independent claim 15.

Additionally, the examiner argued that paragraph 72 of Collins discloses teaching adjusting the screen data transmitted to the served station automatically based on the measurement of the network performance, wherein adjusting the screen data comprises modifying a frame buffer scanning algorithm based on the network performance, as recited in independent claim 15. *See* Examiner’s Answer, page 22. The appellant reviewed this cited portion of Collins and respectfully submits that this portion of Collins is directed to correcting “overscroll”, i.e., initiating a plurality of scroll commands such as clicking on the scroll bar or dragging a scrollbar with a mouse a number of times and having data returned faster than can be displayed on a screen. *See* Collins, paragraphs 71-72. However, there is no suggestion that this process in Collins of

correcting the rate at which screen images are scrolled through is analogous to modifying a frame buffer scanning algorithm based on network performance, as recited in independent claim 15. That is, there is no discussion of scanning in the cited portion of Collins, let alone modification of a frame buffer scanning algorithm.

As such, for at least the reasons set forth above, Collins fails to disclose all recitations of independent claim 15 and, therefore, cannot anticipate the claim under Section 102. Accordingly, the appellant respectfully requests that the Board direct the examiner to withdraw rejection and allow independent claim 15, as well as all claims depending therefrom.

Omitted Features of Independent Claims 31 and 40

Collins fails to anticipate all elements of independent claims 31 and 40. Independent claim 31 recites, *inter alia*, “linking a serving station to a served station via a network, the serving station being coupled to a medical diagnostic imaging system for controlling the imaging system and being configured to receive image data.” (Emphasis added.) Similarly, independent claim 40 recites, *inter alia*, “a serving station coupled to a medical diagnostic imaging system for controlling the imaging system and configured to receive image data.” (Emphasis added.)

Again, similar to the argument set forth above with respect to independent claims 1 and 15, independent claim 31 and 40 recite a serving station that is coupled to a medical diagnostic imaging system. It appears that the examiner has wholly ignored these recitations in rejecting independent claims 31 and 40. *See* Examiner’s Answer, pages 11 and 13. There is simply no disclosure of any element in Collins that is coupled to a medical diagnostic imaging system, let alone a serving station coupled thereto. Indeed, even in the arguments section of the examiner’s answer, the examiner is wholly silent as to the disclosure of any element coupled to a medical diagnostic imaging system, let alone a serving station coupled to a medical diagnostic imaging system, as recited in independent claims 31 and 40. *See* Examiner’s Answer, pages 22-23. Moreover, because Collins fails to disclose any element coupled to a medical diagnostic imaging system, clearly Collins also cannot be read as disclosing a serving station that controls the (medical diagnostic) imaging system, as recited in independent claims 31 and 40. Accordingly,

the appellant respectfully submits that Collins fails to anticipate all elements of independent claims 31 and 40.

Therefore, for at least the reasons set forth above, Collins cannot anticipate either of independent claims 31 and 40 under Section 102. As such, the appellant respectfully requests that the Board direct the examiner to withdraw rejection and allow independent claims 31 and 40, as well as all claims depending therefrom.

Omitted Features of Independent Claim 42

Collins also fails to anticipate all elements of independent claim 42. Independent claim 42 recites, *inter alia*, “a serving station configured to receive the image data and control the imaging system, the serving station comprising a scanner module configured to modify a scanning rate of the image data, and an encoder module configured to modify an encoding format of the image data, a served station configured to receive modified image data from the serving station and to interact with the serving station via a network, and a plurality of network sensors in communication with the serving station.” (Emphasis added.)

Similar to the argument set forth above with respect to independent claim 1, the appellant is unable to find any discussion in Collins relating to a scanner module configured to modify a scanning rate of the image data, as recited in independent claim 42. While the examiner has argued that a server agent 160 of Collins may be read as the recited scanner module (*see* Examiner’s Answer, page 23) it appears that the server agent 160 of Collins, at best, adapts the processing rate of graphical data in response to changing conditions. *See* Collins, paragraph 14. However, the processing rate disclosed by Collins appears to be more aptly read to be the rate at which graphical data may be transmitted to a remote user workstation (*see* Collins, paragraph 14), and not the rate at which image data is scanned (i.e., the scanning rate of the image data), as recited in independent claim 42. That is, there is no disclosure in Collins that modifying a processing rate of graphical data (which, for example, would have already been scanned to form the graphical data) is analogous to modifying the scanning rate of the image data, as recited in independent claim 42. As such, the appellant respectfully submits that the examiner has erred in

reading the server agent 160 as the scanner module of independent claim 42 because the server agent 160 of Collins fails to modify the scanning rate of the image data, as recited in independent claim 42.

Furthermore, the examiner cited all of paragraph 14 of Collins as teaching a plurality of network sensors in communication with the serving station, as recited in independent claim 42. *See Examiner's Answer, page 14.* Moreover, the examiner further argued that the disclosure of a determination of network conditions of a given network was sufficient to anticipate a plurality of network sensors in communication with the serving station, as recited in independent claim 42. *See Examiner's Answer, page 23.* The appellant notes that while the cited portion of Collins may generally discuss determining the network conditions of a network that couples client and server agents (*See Collins, paragraph 14*) there is nothing in this general disclosure that anticipates with any specificity how the network conditions are to be determined. For example, network conditions could be measured via transmission of test packets inclusive of pilot symbols from one location to another in the network to determine noise and/or packet collisions in the network. Or, for example, packets could be transmitted along various network paths to determine latency across those paths to be used in determining the network conditions. In short, the cited portion of Collins simply does not disclose the manner in which network conditions may be determined. Accordingly, it is improper for the examiner to suggest that a disclosure by Collins that network conditions may be determined is sufficient to anticipate how those network conditions are specifically determined, i.e., by a plurality of network sensors in communication with the serving station, as recited in independent claim 42. Collins simply does not disclose the use of any elements that may be read as a plurality of network sensors, let alone a plurality of network sensors in communication with the serving station, as recited in independent claim 42.

As such, for at least the reasons set forth above, Collins fails to disclose all recitations of independent claim 42 and, therefore, cannot anticipate the claim under Section 102. Accordingly, the appellant respectfully requests that the Board direct the examiner to withdraw rejection and allow independent claim 42, as well as all claims depending therefrom.

Second Ground of Rejection

In the examiner's answer, the examiner maintained that claims 4, 14, and 41 were rejected under 35 U.S.C. § 103(a) as unpatentable over Collins in view of Tanenbaum. The appellant respectfully urges the Board to reverse this rejection in view of the reasons set forth in the appellant's brief, and reiterated below.

Legal Precedent

The burden of establishing a *prima facie* case of obviousness falls on the examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (B.P.A.I. 1979). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 180 U.S.P.Q. 580 (C.C.P.A. 1974). However, it is not enough to show that all the elements exist in the prior art since a claimed invention composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. *KSR International Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007). It is important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. *Id.* Specifically, there must be some articulated reasoning with a rational underpinning to support a conclusion of obviousness; a conclusory statement will not suffice. *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). Indeed, the factual inquiry determining whether to combine references must be thorough and searching, and it must be based on *objective evidence of record*. *In re Lee*, 61 U.S.P.Q.2d 1430, 1436 (Fed. Cir. 2002).

Omitted Features of Independent Claim 41

Collins in view of Tanenbaum fails to teach or show all elements of independent claim 41. Independent claim 41 recites, *inter alia*, "a serving station coupled to a medical diagnostic imaging system for controlling the imaging system and configured to receive image data." (Emphasis added.)

Similar to the argument set forth above with respect to independent claims 1, 15, 31, and 40, independent claim 41 recites a serving station that is coupled to a medical diagnostic imaging

system. It appears that the examiner has wholly ignored these recitations in rejecting independent claim 41. *See* Examiner's Answer, page 18. There is simply no teaching of any element in Collins that is coupled to a medical diagnostic imaging system, let alone a serving station coupled thereto. Indeed, even in the arguments section of the examiner's answer, the examiner is wholly silent as to the teaching of any element coupled to a medical diagnostic imaging system, let alone a serving station coupled to a medical diagnostic imaging system, as recited in independent claim 41. *See* Examiner's Answer, pages 23-24. Moreover, because Collins fails to teach any element coupled to a medical diagnostic imaging system, clearly Collins also cannot be read as teaching a serving station that controls the (medical diagnostic) imaging system, as recited in independent claim 41. Accordingly, the appellant respectfully submits that Collins fails to anticipate all elements of independent claim 41. Additionally, the appellant submits that Tanenbaum fails to obviate the above discussed deficiency of Collins, and further notes that the examiner has not challenged this assertion. *See* Examiner's Answer, pages 18-19 and 23-24.

As such, the appellant respectfully submits that neither Collins nor Tanenbaum, taken separately or in hypothetical combination, teach all elements of independent claim 41. Therefore, the appellant respectfully requests that the Board direct the examiner to withdraw rejection and allow independent claim 41.

Conclusion

The appellant respectfully submits that all pending claims are in condition for allowance and urges the Board to reverse the outstanding rejections.

Respectfully submitted,

Date: February 1, 2011

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